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KING, SIMON

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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on <u>07 July 2009</u>.

2a)☐ This action is **FINAL**.   2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) <u>1-32</u> is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) <u>1-32</u> is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☐ All   b)☐ Some * c)☐ None of:

    1.☐ Certified copies of the priority documents have been received.

    2.☐ Certified copies of the priority documents have been received in Application No. _____.

    3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1)☒ Notice of References Cited (PTO-892)
2)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3)☐ Information Disclosure Statement(s) (PTO/SB/08)
    Paper No(s)/Mail Date _____.

4)☐ Interview Summary (PTO-413)
    Paper No(s)/Mail Date. _____.
5)☐ Notice of Informal Patent Application
6)☐ Other: _____.

DETAILED ACTION

Response to Arguments

1.   Applicant's arguments, see remarks, filed 7/7/2009, with respect to the rejection(s) of claim(s) 1-32 under Johansson et al. (US 2002/0080752 A1) have been fully considered and are persuasive. Therefore, the rejection has been withdrawn. However, upon further consideration, a new ground(s) of rejection is made in view of Grabelsky et al. (US 7,450,560 B1).

Claim Rejections - 35 USC § 101

2.   35 U.S.C. 101 reads as follows:

> Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claims 1-14 rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter, since, the claims are directed towards a process that is not tied to steps of an apparatus. A 35 USC 101 process must (1) be tied to another statutory class (such as a particular apparatus) or (2) transform underlying subject matter (such as an article or materials) to a different state or thing. If neither of these requirements is met by the claim, the method is not a patent eligible process under 35 USC 101 (See MPEP 2106.IV.C.).

Claim Rejections - 35 USC § 112

3.   The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4.   Claims 2-13, 16-28, and 30-32 rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which

applicant regards as the invention. Regarding claims 2-13, the cited claims as "A method…..".

Regarding claims 16-28, the cited claims as "A network element….". Regarding claims 30-32,

the cited claims as "A communication system". Please correct their antecedent basis as

according to their independent claim.

Claim Rejections - 35 USC § 102

5.   The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the

basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by
> another filed in the United States before the invention by the applicant for patent or (2) a patent
> granted on an application for patent by another filed in the United States before the invention by the
> applicant for patent, except that an international application filed under the treaty defined in section
> 351(a) shall have the effects for purposes of this subsection of an application filed in the United States
> only if the international application designated the United States and was published under Article 21(2)
> of such treaty in the English language.

6.   Claims 1-3, 5-17, and 19-32 rejected under 35 U.S.C. 102(e) as being anticipated by

Grabelsky et al. (US 7,450,560 B1).

As for claim 1, Grabelsky discloses a method for configuring addresses in a packet

switched data communication system (title), the method comprising: configuring a temporary

address (c8, ln 29-43: well known in the art that DHCP provides temporary address: c9, ln 16-

30) for an interface of a sub-element (Fig.1 and 2: IP interface on communication card 24) of a

network element (Fig.2: NAS 2), the network element comprising a control module (Fig.2:

Router Subsystem 20) and the sub-element (Fig.2: communication card 24), wherein the

temporary address is valid in an internal network associated with the network element (c10, ln

32-47 and c11, ln 16-42: Fig.15); retrieving an identifier of the network element from the control

module (c11, ln 45-63); and defining a second address for the interface of the sub-element

based on the retrieved identifier of the network element and the temporary address (c11, ln 45-

63: c12, ln 19-24 and Fig.14), wherein the second address is valid in an external network with

which the network element communicates (c11, ln 59-63).

As for claims 2 and 16, Grabelsky discloses a method and network element, wherein the

temporary address is a local link layer address for the interface of the sub-element (c11, ln 23-

24: MAC address)

As for claims 3 and 17, Grabelsky discloses a method and network element, wherein the

temporary address for the interface of the sub-element is configured based on the position of

the sub-element in the network element (c6, ln 1-11).

As for claims 5 and 19, Grabelsky discloses a method and network element, wherein the

control module is configured to access the identifier of the network element without

communicating with other network elements (c11, ln 45-63).

As for claims 6 and 20, Grabelsky discloses a method and network element, wherein the

control module is configured to store the identifier of the network element in a memory of the

control module (Fig.2: Router Subsystem 20: c6, ln 12-15).

As for claims 7 and 21, Grabelsky discloses a method and network element, further

comprising verifying the uniqueness of the second address using a duplicate address detection

process (c12, ln 35-38).

As for claims 8 and 22, Grabelsky discloses a method and network element, wherein the

identifier of the network element is retrieved from the control module using the temporary

address as a unique address to carry out an automatic address resolution procedure locally in

the network element (c16, ln 1-10: IPv6, well known in the art that IPv6 provides autoconfig on

IP address).

As for claims 9 and 23, Grabelsky discloses a method and network element, wherein the defined second address comprises a network layer address for the interface of the sub-element (Fig.2: IP interface on communication card 24).

As for claims 10 and 24, Grabelsky discloses a method and network element, further comprising blocking, inside the network element, all data packets that do not contain the identifier of the network element (c14, ln 1-32).

As for claims 11, Grabelsky discloses a method, further comprising enabling the interface of the sub-element for network element external communication after the second address for the interface of the sub-element is defined (c14, ln 1-10).

As for claims 12 and 25, Grabelsky discloses a method and network element, further comprising retrieving a network portion identifying a logical network including the network portion with the second address of the interface of the sub-element (c11, ln 60-63).

As for claim13, Grabelsky discloses a method, wherein the logical network is a layer 2 switched local area network with at least two network elements (Fig.2).

As for claim 14, Grabelsky discloses a computer program product comprising program code for performing the method of claim 1, the program code embodied on a computer-readable memory and executable by a processor of the network element (c6, ln 12-37).

As for claim 15, Grabelsky discloses a network element comprising: a sub-element; a control module; a processor; and a computer-readable memory operably coupled to the processor, the computer- readable memory comprising instructions that, upon execution by the processor (c6, ln 12-37), cause the network element to configure a temporary address for an interface of the sub-element, wherein the temporary address is valid in an internal network associated with the network element; retrieve an identifier of the network element from the control module; and define a second address for the interface of the sub-element based on the

retrieved identifier of the network element and the temporary address, wherein the second

address is valid in an external network with which the network element communicates (see

rejection for claim 1).

As for claims 26 and 32, Grabelsky discloses a network element and communication

system, wherein the local link layer address is based on a 48-bit media access control identifier

format (c11, ln 24: MAC: c15, ln 66-67 and c16, ln 1-10: address mapping using IPv4, well

known in the art that IPv4 uses 48-bit MAC).

As for claims 27 and 31, Grabelsky discloses a network element and communication

system, wherein the network layer address is one of a link-local Internet Protocol version 6

address based on an EUI-64 identifier and an Internet Protocol version 4 address using a

dynamic host configuration protocol (c15, ln 66-67 and c16, ln 1-10: address mapping using

IPv6, well known in the art that IPv6 uses EUI-64 identifier).

As for claim 28, Grabelsky discloses a network element, wherein the network element is

a transceiver (c1, ln 51-52: modem).

As for claim 29, Grabelsky discloses a communication system comprising: a logical

network comprising at least two network elements, a network element of the at least two

network elements comprising at least one sub-element and a control module; a configuring

means for configuring a temporary address for an interface of a sub-element of the at least one

sub-element, wherein the temporary address is valid in an internal network associated with the

network element, and to define an address for the interface of the sub-element based on an

identifier of the network element retrieved by a retrieving means from the control module and

the temporary address, wherein the second address is valid in an external network with which

the network element communicates (see rejection for claim 1).

As for claim 30, Grabelsky discloses a communication system, wherein the defined

address further comprises a network portion identifying the logical network (see rejection for

claim 12).

Claim Rejections - 35 USC § 103

7.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set
> forth in section 102 of this title, if the differences between the subject matter sought to be patented and
> the prior art are such that the subject matter as a whole would have been obvious at the time the
> invention was made to a person having ordinary skill in the art to which said subject matter pertains.
> Patentability shall not be negatived by the manner in which the invention was made.

8.   Claims 4 and 18 rejected under 35 U.S.C. 103(a) as being unpatentable over Grabelsky

et al. (US 7,450,560 B1) in view of Estes et al. (US 7,158,776 B1).

        As for claims 4 and 18, Grabelsky discloses the method and network element for the

claimed invention except where based on a serial number.

        However, Estes discloses where configuration of a temporary IP address based on

serial number of the device for the purpose of unique identification (Estes: c7, ln 52-59).

        Therefore, it would have been obvious to one of ordinary skill in the art at the time of the

applicant's invention to configure a IP address based on serial number of the device as taught

by Estes in Grabelsky for the purpose of unique identification.

Conclusion

        Any inquiry concerning this communication or earlier communications from the examiner

should be directed to SIMON KING whose telephone number is (571)270-1950. The examiner

can normally be reached on 8:00 - 5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, FAN TSANG can be reached on (571)272-7547. The fax phone number for the

organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent

Application Information Retrieval (PAIR) system. Status information for published applications

may be obtained from either Private PAIR or Public PAIR. Status information for unpublished

applications is available through Private PAIR only. For more information about the PAIR

system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private

PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you

would like assistance from a USPTO Customer Service Representative or access to the

automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

13 July 2009   /SIMON KING/
                                                          Examiner, Art Unit 2614

/Simon Sing/
Primary Examiner, Art Unit 2614